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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/7487, 411	06/07/95	HARVEY	J 5634.318

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EXAMINER

SAFOUREK, B

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**Application No.  
08/487,411

Applicant(s)

Harvey et al

Examiner

Jim Groody

Group Art Unit  
2619 Responsive to communication(s) filed on \_\_\_\_\_ This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

- Claim(s) 7-15 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 7-15 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
- received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

**-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --**

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**Part III DETAILED ACTION**

1. This action is in response to the amendment(s) filed 6/7/95, 12/4/95 and 5/13/96

2. This action will not attempt to determine the effective filing date of this application. The action will apply art against the claims using two possible effective filing dates, i.e. serial number 06/317,510, filed November 3, 1981, and serial number 07/096,096, filed September 11, 1987. Applicants can overcome the art rejections by establishing that the art applied does not meet the claimed limitations or that the art does not have an early enough filing date.

The action will make initial double patenting rejections presuming that all of the present claims were fully disclosed in both the '81 and '87 cases.

In any rejections made under 35 USC 112, first paragraph, applicants will be asked to clarify, where required by the examiner, how the present claims are fully disclosed in both the '81 and '87 cases.

3. Applicants are reminded of their duty to maintain a line of patentable demarcation between related applications. It has been noted by the PTO that many of the pending applications have similar claimed subject matter. In the related 327 applications (the serial numbers are included in a list below), it is estimated that there may be between 10,000 and 20,000 claims. Applicants should insure that substantially duplicate claims do not appear in different cases, and should bring to the PTO's attention instances where similar claims have been treated inconsistently, i.e. rejected in one case but not in another.

4. Applicants are cautioned that their continual use of alternatives in the claims raises questions concerning the exact claim meaning. More importantly, it raises questions whether the disclosure supports every possible embodiment or permutation that can be created by the alternative language.

5. The double patenting rejections in this action are based on the premise that all of the present claims were fully disclosed in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414.

Since there was a restriction made in 5,233,654, there will be no double patenting made on that patent or 5,335,277.

6. The PTO's copies of the parent files are in poor form since they have been copied many times by members of the public. The files also are missing some of the papers. The double patenting rejections below presumes that there were no requirements for restriction made in any of the parent files.

7. There are three types of double patenting rejections:

- a) Statutory double patenting rejection under 35 USC 101,
- b) Nonstatutory obvious type double patenting,
- c) Nonstatutory non-obviousness type double patenting.

In this action, the rejections of the third type that are directed to the claims of the parent patented files will have two different versions. The first rejects the claims because they have not been established to be independent and distinct from the patented claims. The second version includes that premise, and further supports the rejection by establishing that representative claims from this application have common subject matter with representative ones of the patented claims.

8. Claims 2-15 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

The subject matter claimed in the instant application is fully disclosed in the patents and is covered by the patents since the patents and the application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method. Furthermore, there is no apparent reason why applicants were prevented from presenting claims corresponding to those of the instant application during prosecution of the parent applications which matured into patents. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in each of the four parent patents (5,109,414; 4,964,825; 4,704,725; 4,694,490) was made. These patented claims do not appear "independent and distinct" from the claims in this application. The present claims are directed to a method and apparatus for controlling communications including

television communications or programming. The claims in patent 5,109,414 were directed to a processing system and method for signal distribution including television. The claims in patent 4,965,825 were directed to a system and process for signal processing including carrier communications. The claims in patent 4,704,725 were directed to a method of communicating data to receiver stations. The claims in patent 4,694,490 were directed to a method for communicating and processing television programs.

Applicants' invention can be envisioned at in three parts. As with most cable TV systems, there is a head end station which generates the video programming. Applicants have included an intermediate station which receives transmissions, from the head end or subscriber stations, and distributes the programming to each subscriber. The subscriber station receives the programming, and can communicate to the intermediate station with requests or instructions. Even if the claims directed to each station were "independent and distinct" from the claims directed to the other stations, there would be no reason to "restrict" between the three stations since their overall function is so interrelated that the stations have the same search area, i.e the

PTO could not establish a burden if required to search for all three stations.

It is believed that CCPA in *Schneller* used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The CCPA stated that the fundamental reason supporting the principle of non-statutory double patenting rejections is to prevent unjustified timewise extension of the right to exclude granted by a patent no matter how the extension is brought about. Further the CCPA stated at 158 USPQ 210 (214) :

"... To conform to this reason and to prevail here, appellant has the burden of establishing that the invention in his patent is "independent and distinct" from the invention of the appealed claims. The public policy considerations underlying 35 U.S.C. 121 permit separate patents on "independent and distinct" inventions which are initially "claimed in one application." The statute places initial responsibility for this determination on the Commissioner of Patents. Where, as here, no such determination has been made, it is necessary to scrutinize carefully an applicant's voluntary alleged determination of this issue for it can lead to the improper proliferation of patents on the same invention with the inherent result of extending timewise a patentee's right to exclude others from the invention disclosed in the original application and on which his patent has issued."

The CCPA further stated at page 215 the length of time between an earlier patent and a later filed application should be

considered. The filing date of this application was over seven years after the first patent issued (serial number 06/317,510, filed November 3, 1981, patented as 4,694,490 on September 15, 1987) and over four years after the first CIP issued as a patent (serial number 07/096,096, filed September 11, 1987, patented as 4,965,825 on October 23, 1990).

To the extent that one would view *Schneller* and *In re Kaplan*, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986) to be in conflict, it is clear that *Schneller* is the controlling precedent to the factual situation here. In *Schneller*, the Court specifically distinguished a situation of the same applicant from one where the application and patent had different inventive entities. In *Kaplan*, the inventive entities between the patent and application were different, as was required at the time of the *Kaplan* invention, since *Kaplan*'s filing date was before the Patent Law Amendments Act of 1984. In this present case, as with *Schneller*, the inventive entities of the application and patent are the same. Clearly, *Kaplan* was required, or entitled, to file separate applications, whereas applicants and *Schneller* did not have reason to do so. Finally, decisions of a three-judge panel of the Federal Circuit cannot overturn prior precedential

decisions of the CCPA. See *UMC Elec. Co. v. United States 2 USPQ2d 1465.*

9. Claims 2-15 (all of the claims in this application) are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the patented claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414 since the claims, if allowed, would improperly extend the "right to exclude" already granted in those patents.

This rejection incorporates the rejection above. That double patenting rejection is further supported by *Schneller* because the great majority of the patented claims are "comprising" type claims.<sup>1</sup> While it is recognized that the specific claim limitations in the application may not have been claimed in the patents, this alone does not establish grounds for overcoming this rejection. The patent claims were directed to parts of applicants' total disclosed system or process. Therefore the recitation of "comprising" enables those patented

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<sup>1</sup>The claims that recite neither "comprising" nor "consisting" are considered to recite open claim language, i.e. equivalent to "comprising". See, for example, claim 1 of Patent 5,109,414.

claims to "cover" claim features now recited by applicants' present application claims.

Since the head end, intermediate, and subscriber stations are part of the overall system, claims to one part "cover" the other part(s) under the *Schneller* decision (page 215), since the preferred embodiment would include all three parts of the main system, i.e. head, intermediate, and subscriber stations. For example, claims to the subscriber station still cover the intermediate station because the subscriber station would be processing information that had to come from the intermediate station. A second example would be that claims to one aspect or function of the intermediate station would cover the invention of another aspect or function of the intermediate station since both functions could be performed with the other. Applicants' disclosed system includes similar features in the head, intermediate, and subscriber stations. For example, the stations can transmit and receive, and have computer, processor and controller capabilities. For that reason, the disclosure will permit broadly drafted claims to read on either the head, intermediate, or subscriber station. Patent claims that recite receiving and transmitting can cover both intermediate and

subscriber stations. The fact that patent claims and application claims are directed to different elements does not prohibit this rejection if there is common or interrelated subject matter recited. The Court in *Schneller* stated at page 215:

"... They "cover" the preferred form ABCXY, common to the patent and this application, in the same sense. The fact that X and Y are distinct elements, performing, independent functions, so that either can be employed without the other, does not change this fact. Neither does appellant's omission of reference to the lip Y from his patent claims."

Application claim 3 is a representative claim. It is directed to a method of controlling a plurality of receiver stations each of which includes a TV receiver, signal detector and processor comprising the steps of receiving at a transmitter station some downloadable executable code which is effective at a receiver to generate a user specific financial analysis, transferring the executable code, receiving one or more control signals to operate the downloadable executable code and transferring the control signals to a transmitter to transmit the executable code and control signals.

A review of representative ones of the patented claims will demonstrate that the patented claims cover the invention claimed in this application:

a) In patent 4,694,490, claim 7 is representative of the claimed method for communicating TV program information to a receiver station. The receiver station receives the video data, displays it, detects the presence of overlay information using an instruct signal, and has computers generate and transmit this overlay info to the display.

b) In patent 4,704,725, claim 3 is representative, and, as summarized below, recites a method of communicating data comprising:

- a) multiple receivers, each with a computer,
- b) transmitting instruct to transmit signals to the computers,
- c) detecting the signals and coupling them to the selected computers,
- d) having the computers control their own selected output device.

c) In patent 4,965,825, claim 24 is representative, and, as summarized below, recites generating a computer output having the steps of:

- a) having multiple receivers, each with a computer,
- b) transmitting an instruct to generate signal to the computers,
- c) causing the computers to generate individual user output information.

d) In patent 5,109,414, claim 15 is representative, and, as summarized below, recites a signal processing system (including):

- a) receiver/distribution means,
- b) switch means,
- c) control signal detector means for transferring data to storage means,
- d) storage means for storing and transferring data to processor means,
- e) processor means for controlling.

While claim 15 is an apparatus claim, a method claim and apparatus claim do not in themselves establish groups that are "independent and distinct".

The patented claims are also primarily directed to methods or structure to control element(s) either directly at that station or at another remote station. This control is generally completed with the reception or recognition of an instruct signal. The same common concept exists in application claim 3. All of the claims, both patented and pending in this application, when considered together, effectively recite parts of the preferred embodiment, i.e. a head, intermediate, and subscriber station. The patented claims "cover" the claims of the application because the patented limitations do not exclude the limitations of this application.

In the arguments above, the examiner, when discussing several of the patents, stated that the patented claims were broad enough to read on multiple stations. While it is believed this analysis is correct, it is not critical to this rejection. Since the patented claims recite limitations that are interrelated with other similar features claimed in this application, it is the examiner's position that those patented claims "cover" the application claims because all of these claimed features (both in the patent and application) describe what is effectively the preferred embodiment.

The claims in this application, if allowed without a terminal disclaimer, would continue patent protection of the preferred embodiment, i.e. the complete system of the head, intermediate, and subscriber stations, beyond the expiration of applicants' parent patents.

10. It is acknowledged that a multiplicity rejection was mailed on July 27, 1989 in parent file 07/096,096. In this rejection, the examiner had limited the applicants to 25 claims.

*Schneller did not equate a multiplicity rejection with a restriction requirement as a permissible exception to being*

subject to the non-obvious non--statutory double patenting rejection. For that reason, this action will not overturn the legal reasoning in *Schneller* which supports the non-statutory non-obviousness double patenting rejection above.

It is believed, however, that applicants arguments on this multiplicity issue can be better supported if a nexus is established between the claims of this application and those that were canceled in 07/096,096 in response to the multiplicity requirement.

Notwithstanding the comment above, at the time the examiner made the multiplicity rejection, there was a body of case law that had overturned similar rejections. Note *In re Flint* 162 USPQ 228 (CCPA 1969) and *In re Wakefield*, 164 USPQ 636 (CCPA 1970).

11. A determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time. This action is taken if view of the possibility that many of these applications may be abandoned or merged.

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12. Claims 2-15 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S application 08/113,329 and the following related U.S applications (all of the application are series 08) :

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#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657
22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726
82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309

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#	Ser. No.	#	Ser. No.	#	Ser. No.
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699
142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994

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#	Ser. No.	#	Ser. No.	#	Ser. No.
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612
202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215
262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276

#	Ser. No.	#	Ser. No.	#	Ser. No.
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	*****	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436
322	488438	323	488439	324	488619
325	488620	326	498002	327	511491

The subject matter claimed in the instant application is fully disclosed in the referenced copending applications and would be covered by any patent granted on that copending applications since the referenced copending applications and the instant application are claiming common subject matter, as follows: a signal processing apparatus and method including an interactive communications system apparatus and method.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending applications. *In re*

*Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

A review of the claims in the related copending applications was made. These claims do not appear independent and distinct from the claims in this application. It is believed that CCPA in *Schneller* used the "independent and distinct" standard as the main factor in its determination that the double patenting rejection should be affirmed. The relevant arguments in the preceding paragraphs in support of this position are incorporated herein.

13. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornam*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 3-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention.

The examiner must be able to determine the meets and bounds of the claims to perform an effective search and analysis over the art. The examiner is not certain that the meets and bounds of these claims can be determined because of the language in the disclosure and claims. For example, the disclosure teaches many transmitter and receiver stations, instruct signals, control signals, decoders, etc. (This is just a partial list of terms in

applicants' disclosure that apply to plural elements in that disclosure.) When these phrases are claimed, the examiner needs to know "which" element in the disclosure is performing the claimed step. For example, when a hypothetical claim recites "transmitter station", and the disclosure teaches different ones (those in the origination, intermediate, and subscriber stations), the examiner needs to be able to envision what applicants could be claiming.

Applicants' assigned multiple meanings to words in a claim makes a claim indefinite.

Traditionally, examiners "diagram" claims to determine the meets and bounds. To explain what "diagramming" means, the examiner attempts to draw a picture (generally a circuit or a connection of block elements in an electrical application) which represents what was claimed so that the examiner can visualize how a mythical reference could anticipate the claim, if the claim was given its broadest reading. If the claim recites terms or phrases that have multiple meanings in the disclosure, the examiner can't determine whether the diagram of the claim is correct. Given this, how can the examiner determine whether or

not the scope of the art searched for is commiserate with the broadest reading of the claim?

Admittedly, the size of applicants' disclosure with its numerous possible implementations is contributing to the problem, but the problem does exist. Applicants are being requested to reference the claim limitations in this application to the disclosure so that the meets and bounds of these claims can be properly considered. This can be done in a remarks section, the claims do not have to be amended.

15. Claims 2-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The signal in which the control signal presence is detected in lines 12-13 is confusing as it seems to read on the original transmission yet applicants surely mean detecting in the received broadcast or cablecast transmission. The detected control signals go to the computer but nothing else. Claim 3 calls for controlling a plurality of receiver stations in line one yet a receiver is never controlled by any of the claimed steps. The

code of line 7 could be for anything until it reaches a processor and is used. Lines 10 and 11 call for transferring code from a transmitter station to a transmitter. This seems to imply that the transmitter is not at the transmitter station. Lines 14-16 again transfer signals from a transmitter station to a transmitter. How can a signal as in line 13 operate to execute anything, let alone code? The "identification data in respect of" of claim 4, line 2 are never generated. The "said computer" of lines 2-3 of claim 5 lacks a definite antecedent. The audio, video or text that are output in line 3 lack a source. "Said television program" in lines 3-4, 4 and 5 lacks an antecedent basis. Claim 6 now says the code is not the code but the control signals are. Claim 7 alternates between a remote transmitter station and a remote intermediate transmitter station. Lines 4-12 of claim 7 have devices and controllers doing the selection and transmission while lines 13-15 have the transmitter being instructed and lines 16-17 have the station doing the controlling. Lines 19-20 get really confusing as the controller using the control signals is at the station, not the transmitter. For claim 8, the instruct signal was not sent to "said remote transmitter station" but a remote intermediate station. Claim 9

conflicts with parent claim 7 as the instruct signal has already been transmitted and received. In claim 9 do different control signals control different devices or does one signal control at different times? Claim 10 never makes a television presentation as lines 1 and 2 require. The only location to which the instruct signal seems to be communicated in claim 10 is the storage device. No other location can be selected. Claim 11 is not properly dependent on claim 10 since the instruct signal cannot be selective, it goes with the TV signal always. The "said product, service or information" in lines 16-17 of claim 11 lack antecedence. What is displayed in lines 18-20 is never generated. The reaction of line 22 is never generated so it can be stored. Claims 2 and 11-14 are improper Markush group claims. The group claimed are not for producing the same result that cannot be recited in any other way. How can a location be a TV signal as in lines 1 and 2 of claim 12? The claim seems to be reciting storing in a TV signal! The signals of claim 14 have no recited use. There is nothing to switch, time, locate etc. In claim 15, line 7, the "said information" lacks an antecedent. What is a mass medium program that explains a receiver datum? Claim 15 has an output apparatus in line 2 and an output device

in line 8. The output suddenly becomes interactive in line 12 and that has no antecedent. No financial analysis can be output in line 16 of claim 15 because it has never been inputted. Is the signal of line 18 the message of line 15? If not, it cannot be used to deliver as in lines 19 and 20 of claim 15. How can processing the taste and interest in lines 8 and 9 of claim 2 produce a financial analysis?

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

17. Claim 2 is rejected under 35 U.S.C. 102(e) as being

anticipated by Campbell 4,536,791.

*24-25* Claim 2 is best explained by reference to Figure 17 of Campbell. The subscriber datum is read as the eligibility or

tier code of Campbell as this is stored and is financial data regarding payment for particular levels of service. The control signals are the addressing data words and channel control word and program codes that are received at the top of Figure 17. The signals are detected by extracting in the 7th step from the top. These go to processor 410 in Figure 7 for processing which then displays a message or "outputting" at step 334 or 332 of Campbell.

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 3-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell 4,536,791 in view of Hedger et al.

Campbell has a transmitter station in Figure 2. It sends programs as well as control signals and teletext. Campbell does not send anything called executable code but this concept is

taught by Hedger et al so as to enable a home receiver to execute a program. For claim 3 it would be a simple matter for one of ordinary skill in the art to use executable code as one of the data source signals to 54 of Campbell. This would be obvious in view of Hedger who teaches that this feature is very desirable for home use. All signals are combined/embedded at 52 of Campbell as in claim 4. The reaction of claim 5 is via 140 or 156 at the receiver. Claim 7 reads on the local operator inputs to 50 to control the instruct codes on lines 41 and 18. The operator would do this before a certain time. Each headend transmitter 47, 56 is controllable as in claim 9. For claim 10 the program is stored in Figure 3 of Campbell at 58 or 70 and the financial data is as discussed for claim 2 above. The title etc. would be stored as in claim 12 addresses are sent as in claim 13 and timing as in claim 14. The prompt of claim 15 is shown in Figure 17 the replay is via FM modem in SCB and the message would be displayed at step 332 of Figure 17.

20. A series of interviews were held before prosecution began on this application. Unless identified specifically below in this part of the action, these interviews did not address the merits

of any single application, but rather issues that are appropriate to all of the related "Harvey" applications.

The first interview was held on August 13, 1995. It was a personal interview. Attending were one of the applicants, Mr. Harvey, and his attorneys, Messrs. Scott and Woolston. Representing the PTO were Messrs. Godici, Yusko, Orsino, and Groody. Mr. Harvey and his attorneys were informed that because of the large number of related applications, the examination would be performed by a team of examiners. As of the August 1995 interview there existed a problem with some of the applications being charged large entity fees when applicants believed that small entity status was deserved. The PTO has referred this matter to the Office of Assistant Commissioner of Patents, specifically Hiram Bernstein, a petitions attorney. Mr. Harvey's representatives will attempt to resolve this issue through Mr. Bernstein. At this time all of the related cases had not been received in the Group. No examination was planned until at least late October because the team members were managers, and needed to complete other end of fiscal year assignments and all employee performance ratings. The PTO requested that any amendments to the specification, other than to correct continuing status, be

delayed. Mr. Harvey's representatives stated that no other amendments to the specification were actually planned. The PTO's goal will be to attempt to reduce the amount of paper passed between applicant and PTO since the cases are related and very difficult to move from cite to cite because of their size. Copies of the prior art only need to be filed once. The PTO will only send newly cited art once. Preliminary amendments are being prepared. The PTO however cautioned that the prosecution of the applications will not be delayed until applicants have filed these amendments. The PTO requested a chart establishing any relationships between cases and what parts of applicants' disclosure related blocks of cases were directed to. It was not, at this time, determined whether this chart would become part of the official file. The PTO planned to research this. It was the PTO's intent to examine related cases simultaneously. The PTO welcomed any claim amendments to include resubmissions of all claims, whether amended or not. Mr. Harvey's representatives were informed that the issue of double patenting was expected to be a major issue.

On November 2, 1995, a telephonic interview was held between Mr. Woolston and Mr. Groody. Mr. Woolston indicated that two

prior art statements were being completed, one for cases with a 1987 effective date, the other for cases with a 1981 effective date.

On November 30, 1995, a personal interview was held. Representing applicants were Messrs. Scott, Woolston, and Grabarek. Representing the PTO were Messrs. Yusko, Orsino, and Groody. The content of a simultaneously filed prior art statement was discussed. The PTO's copies of the parent files are missing the non-U.S. patents cited therein. The PTO requested copies of those prior art documents. Applicants gave the PTO a document showing which cases have already been amended. Since this document merely shows the status of any amended application, it has not been made part of the file record since that paper has no bearing on the merits of any issue before the PTO.

A second interview was held on later on November 30, 1995 between Mr. Scott and Mr. Groody. The sole topic discussed was double patenting. The discussion led to no conclusions on whether a double patenting rejections would be made in these applications.

An interview was held on December 6, 1995 between Mr. Scott and Mr. Groody. The discussion was directed to In re Schneller, 158 USPQ 210 (CCPA) and whether that decision will necessitate a double patenting rejection in any of these cases. Mr Scott was asked whether a terminal disclaimer could be filed in all of the 327 related cases to obviate a possible double patenting rejection in each of these cases over each other. Mr. Scott agreed to consider this.

An interview was held on December 13, 1995 between Mr. Scott and Mr. Groody regarding the terminal disclaimer question above. Mr. Scott proposed filing a terminal disclaimer in about 250 of the 327 cases over each other if the PTO would have each of the about 250 issue within 4 or 6 months of each other. Mr. Groody felt that the PTO would be unwilling to suspend prosecution in some cases just to have other related cases issue close to each other. No agreement was reached.

Two interviews were held between Mr. Scott and Mr. Groody on April 2, 1996. Mr. Scott pointed out that, in parent file 5,233,654, there had been a restriction requirement. After reviewing the file, Mr Groody indicated that there would not be a Schneller double patenting rejection made in any case based on

parent patent 5,233,654 and 5,335,277. The action recently sent out in 08/113,329 would be changed to reflect this point. Mr. Scott inquired whether a terminal disclaimer, in these applications, would have to be filed for all of the four Harvey patents (4,694,490; 4,704,725; 4,965,825; 5,109,414). Mr. Groody felt that all four should be disclaimed, if applicants elect to take that approach toward overcoming the double patenting rejections, because of the requirement in terminal disclaimers concerning common ownership. Mr. Scott indicated that in parent patent 4,965,825, there had been a multiplicity rejection. Mr. Groody will order the file, but felt that rejection would not overcome the Schneller double patenting rejections since the CCPA did not list this situation as an acceptable reason to file continuing cases. The Court limited its exception to "independent and distinct" claims. Mr. Groody acknowledged that the Board of Appeals may accept the multiplicity argument, but, in the absence of case law on this issue, he would still apply the Schneller rejections.

On June 10, 1996, Mr. Scott spoke with Mr. Groody on several topics. Related case 08/397,582 has been withdrawn from issue in Group 2200, and a new action will be mailed containing a double

patenting rejection under *In re Schneller*. This application will now be examiner in Group 2600. Mr. Scott questioned whether applicants can withdraw the terminal disclaimer made in 397,582. Mr. Groody was unsure of the answer, but later checked with Mr. Orsino, who informed him that MPEP 1490 controlled.

Mr. Groody still believes that 08/113,329 can be expedited at the Board. Mr. Scott can refer to the appeal brief to be filed in that case in responding to any application having a *Schneller* double patenting rejection.

A telephone interview was held on June 12, 1996 between Mr. Thomas Woolston and Marc E. Bookbinder representing the PTO. For S.N. 08/448,116, Mr. Woolston indicated that the supplemental preliminary amendment of Nov. 13, 1995 was incomplete and that a complete version of such would be filed shortly to perfect the submission as originally intended. Mr. Woolston also indicated that he intended to file a second supplemental preliminary amendment in this case bringing the total number of claims to 37.

Mr. Bookbinder indicated that the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings. Mr. Woolston

stated that such a grouping was available and that he would forward it to the Group as soon as possible.

Mr. Bookbinder requested that each future amendment filed be accompanied by an electronically readable version thereof. Mr. Woolston stated that he could provide a disk to include one or more amendments made to applications as they were filed.

Mr. Woolston stated that he has reviewed actions that have been mailed and that he takes issue particularly with the double patenting rejections and the way In re Schneller has been applied. Mr. Bookbinder suggested that Mr. Woolston contact Mr. Groody of Group 2600 to discuss the particulars of the double patenting rejections since he was the author of those rejections.

On November 25, 1996, a telephone interview was held between Mr. Scott and Mr. Groody. Mr. Groody informed Mr. Scott that expedited processing at the Board for 113/329 would be arranged by the Office. No action on applicants' part was necessary. Applicants no longer had to submit a listing of related cases, since the examiners did not need that. Finally, application serial number 08/397,582, which has been withdrawn from issue, will be examined over all of the art cited in all of the later filed Harvey cases.

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Art Unit: 2619

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21. The art cited in the information disclosure statements submitted by applicants has been considered. The examiner initialed 1449 forms will be sent in a later action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Groody whose telephone number is (703) 308-5461.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

  
ANDREW FAILE  
PRIMARY EXAMINER  
GROUP 2600

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

**John C. Harvey and James W. Cuddihy** : Examiner:

Serial No. 08/487,411 : Group Unit: 2602

Filed 7-Jun-95 : Atty Dkt: 5634.318

For **SIGNAL PROCESSING APPARATUS AND METHODS**

**COPENDING RELATED U.S. PATENT APPLICATIONS**

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

Listed below are copending U.S. patent applications related to this application.

<u>Application No.</u>	<u>Filing Date</u>	<u>Atty. Dkt.</u>
08/113,329	30-Aug-93	5634.008
08/397,371	2-March-95	5634.017
08/397,582	2-March-95	5634.010
08/397,636	2-March-95	5634.012
08/435,757	9-May-95	5634.036
08/435,758	9-May-95	5634.041
08/437,044	9-May-95	5634.047
08/437,045	9-May-95	5634.042
08/437,629	9-May-95	5634.044
08/437,635	9-May-95	5634.045
08/437,791	9-May-95	5634.040
08/437,819	9-May-95	5634.049
08/437,864	9-May-95	5634.038
08/437,887	9-May-95	5634.037
08/437,937	9-May-95	5634.048
08/438,011	9-May-95	5634.050
08/438,206	9-May-95	5634.039

08/438,216	9-May-95	5634.046
08/438,659	9-May-95	5634.043
08/439,668	15-May-95	5634.062
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08/440,657	15-May-95	5634.051
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08/447,679	23-May-95	5634.130
08/447,711	23-May-93	5634.153
08/447,712	23-May-95	5634.127
08/447,724	23-May-95	5634.131
08/447,726	23-May-95	5634.159
08/447,826	23-May-95	5634.126
08/447,908	23-May-95	5634.134
08/447,938	23-May-95	5634.133
08/447,974	23-May-95	5634.145
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08/448,810	24-May-95	5634.177
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08/469,626	6-Jun-95	5634.272
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08/473,927	7-Jun-95	5634.333
08/473,996	7-Jun-95	5634.073
08/473,997	7-Jun-95	5634.364
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08/473,999	7-Jun-95	5634.342
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08/474,964	7-Jun-95	5634.064
08/475,341	7-Jun-95	5634.160

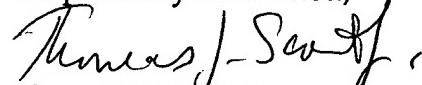
08/475,342	7-Jun-95	5634.234
08/477,547	7-Jun-95	5634.329
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08/477,570	7-Jun-95	5634.335
08/477,660	7-Jun-95	5634.090
08/477,711	7-Jun-95	5634.312
08/477,712	7-Jun-95	5634.173
08/477,805	7-Jun-95	5634.197
08/477,955	7-Jun-95	5634.188
08/478,044	7-Jun-95	5634.334
08/478,107	7-Jun-95	5634.309
08/478,544	7-Jun-95	5634.306
08/478,663	7-Jun-95	5634.099
08/478,767	7-Jun-95	5634.316
08/478,794	7-Jun-95	5634.347
08/478,858	7-Jun-95	5634.351
08/478,864	7-Jun-95	5634.167
08/478,908	7-Jun-95	5634.313
08/479,042	7-Jun-95	5634.352
08/479,215	7-Jun-95	5634.358
08/479,216	7-Jun-95	5634.341
08/479,217	7-Jun-95	5634.093
08/479,374	7-Jun-95	5634.148
08/479,375	7-Jun-95	5634.326
08/479,414	7-Jun-95	5634.359
08/479,523	7-Jun-95	5634.365
08/479,524	7-Jun-95	5634.054
08/479,667	7-Jun-95	5634.192
08/480,059	7-Jun-95	5634.063
08/480,060	7-Jun-95	5634.227
08/480,383	7-Jun-95	5634.349
08/480,392	7-Jun-95	5634.310
08/480,740	7-Jun-95	5634.343
08/481,074	7-Jun-95	5634.190
08/482,573	7-Jun-95	5634.096
08/482,574	7-Jun-95	5634.210
08/482,857	7-Jun-95	5634.311
08/483,054	7-Jun-95	5634.195
08/483,169	7-Jun-95	5634.338
08/483,174	7-Jun-95	5634.251
08/483,269	7-Jun-95	5634.307
08/483,980	7-Jun-95	5634.066
08/484,275	7-Jun-95	5634.323
08/484,276	7-Jun-95	5634.092
08/484,858	7-Jun-95	5634.362

08/484,865	7-Jun-95	5634.348
08/485,282	7-Jun-95	5634.361
08/485,283	7-Jun-95	5634.199
08/485,507	7-Jun-95	5634.304
08/485,772	7-Jun-95	5634.332
08/485,775	7-Jun-95	5634.077
08/486,258	7-Jun-95	5634.357
08/486,259	7-Jun-95	5634.257
08/486,265	7-Jun-95	5634.228
08/486,266	7-Jun-95	5634.337
08/486,297	7-Jun-95	5634.331
08/487,155	7-Jun-95	5634.308
08/487,397	7-Jun-95	5634.250
08/487,408	7-Jun-95	5634.356
08/487,410	7-Jun-95	5634.314
08/487,411	7-Jun-95	5634.318
08/487,428	7-Jun-95	5634.363
08/487,506	7-Jun-95	5634.350
08/487,516	7-Jun-95	5634.094
08/487,526	7-Jun-95	5634.355
08/487,536	7-Jun-95	5634.097
08/487,546	7-Jun-95	5634.325
08/487,556	7-Jun-95	5634.321
08/487,565	7-Jun-95	5634.327
08/487,649	7-Jun-95	5634.344
08/487,851	7-Jun-95	5634.252
08/487,893	7-Jun-95	5634.191
08/487,980	7-Jun-95	5634.076
08/487,981	7-Jun-95	5634.196
08/487,982	7-Jun-95	5634.095
08/487,984	7-Jun-95	5634.346
08/488,032	7-Jun-95	5634.189
08/488,058	7-Jun-95	5634.322
08/488,378	7 Jun 95	5634.339
08/488,383	7-Jun-95	5634.166
08/488,436	7-Jun-95	5634.336
08/488,438	7-Jun-95	5634.235
08/488,439	7-Jun-95	5634.185
08/488,619	7-Jun-95	5634.317
08/488,620	7-Jun-95	5634.354
08/498,002	7-Jun-95	5634.345
08/511,491	6-Jun-95	5634.274

**REMARKS**

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a), Applicants herewith submit a reference to all related copending U.S. Patent Applications now pending before the U.S. Patent and Trademark Office.

Respectfully submitted,



Thomas J. Scott, Jr.

Reg. No. 27,836

Attorney for Applicants

Date: December 13, 1995  
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PATENT

Docket No. 5634.318

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventors: John C. Harvey and James W.  
Cuddihy

Group Art Unit: 2602

Serial No.: 08/487,411

Examiner:

Filing Date: June 7, 1995

For: Signal Processing Apparatus and  
Methods

Assistant Commissioner of Patents  
Washington D.C. 20231

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:

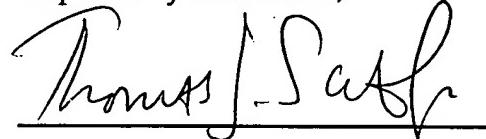
<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Applicants believe that all references cited on the attached PTO 1449 form were cited by or submitted to the PTO in one or more of the cases cited above or in U.S. Patent Application Serial No. 06/829,531, filed February 15, 1986 now U.S. Patent No. 4,704,725 and/or U.S. Patent Application Serial No. 06/317,510, filed November 3, 1981 now U.S. Patent No. 4,694,490. Therefore, no copies of the listed references are provided herewith. It is respectfully requested that the information above be expressly considered during the prosecution of this Application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

**CERTIFICATION AND/OR FEE**

Since this IDS is being filed pursuant to 37 C.F.R § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office Action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: December 15, 1995

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<b>PTO 1449</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	<b>Applicants</b> John C. Harvey and James W. Cuddihy	
	Filing Date: June 7, 1995	Group: 2602
<b>Title: Signal Processing Apparatus and Method</b>		

**U.S. Patent Documents**

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	2,511,085	June 13, 1950	Smith	179/1	
	2,573,349	Oct. 30, 1951	Miller et al.	177/353	
	2,769,023	Oct. 30, 1956	Loew et al.	178/5.1	
	2,788,387	Apr. 9, 1957	Druz	178/5.1	
	2,864,885	Dec. 16, 1958	Morris	178/5.1	
	2,866,962	Dec. 30, 1958	Ellet	340/147	
	3,016,091	Jan. 9, 1962	Daniele	162/391	
	3,071,642	Jan. 1, 1963	Mountjoy et al.	178/5.1	
	3,213,201	Oct. 19, 1965	Flood et al.	179/15	
	3,238,297	Mar. 1, 1966	Pawley et al.	178/22	
	3,363,250	Jan. 9, 1968	Jacobson	343/225	
	3,493,674	Feb., 1970	Houghton	178/5.6	
	3,531,586	Sept. 29, 1970	Bass et al.	178/6	
	3,536,833	Oct. 27, 1970	Guanella	178/22	
	3,569,937	Mar. 9, 1971	Hoetter	340/171	
	3,573,747	Apr. 6, 1971	Adams et al.	340/172.5	
	3,584,142	June 8, 1971	Schoeffler	178/6.8	
	3,601,528	Aug. 24, 1971	McVoy	178/5.1	
	3,609,697	Sept. 28, 1971	Blevins et al.	340/172.5	
	3,657,699	Apr. 18, 1972	Rocher et al.	340/146.1	

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Attorney Docket No. 5634.318	Serial No. 08/487,411
		Applicants John C. Harvey and James W. Cuddihy	
Title: <b>Signal Processing Apparatus and Method</b>		Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,659,046	Apr. 25, 1972	Angeleri et al.	178/22	
	3,668,307	June 6, 1972	Face et al.	178/5.6	
	3,684,823	Aug. 15, 1972	McVoy	178/5.1	
	3,693,090	Sept. 19, 1972	Gabriel	325/308	
	3,703,684	Nov. 21 1972	McVoy	325/31	
	3,725,672	Apr. 3, 1973	Reuter	307/208	
	3,729,581	Apr. 24, 1973	Anderson	178/6.8	
	3,731,197	May 1, 1973	Clark	325/32	
	3,733,430	May 15, 1973	Thompson et al.	178/5.1	
	3,736,369	May 29, 1973	Vogelman et al.	178/5.1	
	3,749,845	July 31, 1973	Fraser	179/15	
	3,752,908	Aug. 14, 1973	Boenke et al.	178/5.6	
	3,757,225	Sep. 4, 1973	Ukicki	325/308	
	3,773,977	Nov. 20, 1973	Guanella	179/1.5	
	3,777,053	Dec. 4, 1973	Wittig et al.	178/5.1	
	3,789,137	Jan. 29, 1974	Newell	178/6.6	
	3,790,700	Feb. 5, 1974	Callais et al.	178/5.1	
	3,798,359	Mar. 19, 1974	Feistel	178/22	
	3,798,610	Mar. 19, 1974	Bliss et al.	340/172.5	
	3,803,491	Apr. 9, 1974	Osborn	325/53	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	Applicants John C. Harvey and James W. Cuddihy	
	Title: <b>Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,806,814	Apr. 23, 1974	Forbes	325/309	
	3,819,852	June 25, 1974	Wolf	178/5.6	
	3,824,332	July 16, 1974	Horowitz	178/5.1	
	3,824,467	July 16, 1974	French	325/32	
	3,825,893	July 23, 1974	Bossen et al.	340/146.1	
	3,833,757	Sept. 3, 1974	Kirk, Jr. et al.	178/5.6	
	3,835,387	Sep. 10, 1974	Rookes et al.	325/55	
	3,842,196	Oct. 15, 1974	Louglin	358/12	
	3,845,391	Oct. 29, 1974	Crosby	325/64	
	3,848,193	Nov. 12, 1974	Martin et al.	325/53	
	3,882,392	May 6, 1975	Harney	325/53	
	3,885,089	May 20, 1975	Callais et al.	178/5.1	
	3,886,302	May 27, 1975	Kosco	178/5.1	
	3,886,454	May 27, 1975	Oakley et al.	325/52	
	3,890,461	June 17, 1975	Vogelman et al.	178/5.1	
	3,891,792	June 24, 1975	Kimura	178/5.8R	
	3,893,031	July 1, 1975	Majeau et al.	325/32	
	3,894,176	July 8, 1975	Mellon	178/5.1	
	3,899,633	Aug. 12, 1975	Sorenson et al.	178/5.1	
	3,911,216	Oct. 7, 1975	Bartek et al.	178/22	

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		Applicants John C. Harvey and James W. Cuddihy	
Title: <b>Signal Processing Apparatus and Method</b>		Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,914,534	Oct. 21, 1975	Forbes	178/5.1	
	3,916,091	Oct. 28, 1975	Kirk, Jr. et al.	178/5.1	
	3,919,462	Nov. 11, 1975	Hartung et al.	178/5.1	
	3,921,151	Nov. 18, 1975	Guanella	340/172.5	
	3,924,187	Dec. 2, 1975	Dormans	325/52	
	3,934,079	Jan. 20, 1976	Barnhart	178/5.1	
	3,936,593	Feb. 3, 1976	Aaronson et al.	178/5.1	
	3,936,594	Feb. 3, 1976	Schubin et al.	178/5.1	
	3,936,595	Feb. 3, 1976	Yanagimachi et al.	178/5.6	
	3,943,447	Mar. 9, 1976	Shomo, III	325/308	
	3,947,882	Mar. 30, 1976	Lightner	360/92	
	3,949,313	Apr. 6 1976	Tamada et al.	329/106	
	3,956,615	May 11, 1976	Anderson et al.	235/61.7B	
	3,970,790	July 20, 1976	Guanella	179/1.5S	
	3,975,583	Aug. 17, 1976	Meadows	175/5.6	
	3,978,449	Aug. 31, 1976	Sanders et al.	340/146.1	
	3,987,398	Oct. 19, 1976	Fung	325/309	
	3,988,528	Oct. 26, 1976	Yanagimachi et al.	178/5.6	
	3,997,718	Dec. 14, 1976	Ricketts et al.	178/6.8	
	4,024,574	May 17, 1977	Nieson	358/117	

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	Applicants John C. Harvey and James W. Cuddihy	
	Title: <b>Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,025,851	May 24, 1977	Hazelwood et al.	325/31	
	4,025,947	May 24, 1977	Michael	358/86	
	4,025,948	May 24, 1977	Loshin	358/122	
	4,031,548	June 21, 1977	Kato et al.	358/188	
	4,048,619	Sept. 13, 1977	Forman, Jr. et al.	340/154	
	4,049,906	Sept. 20, 1977	Hafner et al.	178/2C	
	4,054,911	Oct. 18, 1977	Fletcher et al.	358/141	
	4,058,830	Nov. 15, 1977	Gulnet et al.	358/86	
	4,068,264	Jan. 10, 1978	Pires	358/122	
	4,079,419	Mar. 14, 1978	Siegle et al.	358/193	
	4,081,612	Mar. 28, 1978	Hafner	179/15BA	
	4,081,753	Mar. 28, 1978	Miller	325/396	
	4,081,831	Mar. 28, 1978	Tang et al.	358/114	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,104,486	Aug. 1, 1978	Martin et al.	179/2	
	4,107,735	Aug. 15, 1978	Frohbach	358/84	
	4,112,464	Sept. 5, 1978	Gulf et al.	358/122	
	4,115,662	Sept. 19, 1978	Gulnet et al.	179/15BV	
	4,115,807	Sept 19, 1978	Pires	358/122	
	4,120,030	Oct. 10, 1978	Johnstine	364/200	

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		Applicants John C. Harvey and James W. Cuddihy	
<b>Title: Signal Processing Apparatus and Method</b>		Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,130,833	Dec. 19, 1978	Choenet	358/122	
	4,131,881	Dec. 26, 1978	Robinson	340/167R	
	4,138,726	Feb. 6, 1979	Girault et al.	364/521	
	4,160,120	July 3, 1979	Barnes et al.	178/22	
	4,161,751	July 17, 1979	Ost	358/114	
	4,163,254	July 31, 1979	Block et al.	358/122	
	4,163,255	July 31, 1979	Pires	358/122	
	4,168,396	Sept. 18, 1979	Best	178/22	
	4,170,782	Oct. 9, 1979	Miller	358/84	
	4,171,513	Oct. 16, 1979	Otey et al.	325/32	
	4,172,213	Oct. 23, 1979	Barnes et al.	178/22	
	4,186,413	Jan. 29, 1980	Mortimer	358/146	
	4,196,310	Apr. 1, 1980	Forman et al.	178/22	
	4,200,770	Apr. 29, 1980	Hellman et al.	178/22	
	4,200,913	Apr. 29, 1980	Kuhar et al.	364/900	
	4,205,343	May 27, 1980	Barrett	358/147	
	4,213,124	July 15, 1980	Barda et al.	340/706	
	4,215,366	July 29, 1980	Davidson	358/124	
	4,215,370	July 29, 1980	Kirk, Jr.	358/146	
	4,225,884	Sept. 30, 1980	Block et al.	358/122	

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		Applicants John C. Harvey and James W. Cuddihy	
Title: <b>Signal Processing Apparatus and Method</b>		Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,225,967	Sep. 30, 1980	Miwa et al.	455/68	
	4,230,990	Oct. 28, 1980	Lert, Jr et al.	455/67	
	4,232,193	Nov. 4, 1980	Gerard	179/1.5R	
	4,236,217	Nov. 25, 1980	Kennedy	364/483	
	4,237,484	Dec. 2, 1980	Brown et al.	358/142	
	4,245,245	Jan. 13, 1981	Matsumoto et al.	358/122	
	4,247,106	Jan. 27, 1981	Jeffers et al.	273/85G	
	4,250,524	Feb. 10, 1981	Tomizawa	358/122	
	4,253,114	Feb. 24, 1981	Tang et al.	358/114	
	4,253,157	Feb. 24, 1981	Kirschner et al.	364/900	
	4,262,329	Apr. 14, 1981	Bright et al.	364/200	
	4,264,924	Apr. 28, 1981	Freeman	358/86	
	4,264,925	Apr. 28, 1981	Freeman et al.	358/86	
	4,266,243	May 5, 1981	Shutterly	358/121	
	4,275,411	June 23, 1981	Lippel	358/13	
	4,283,602	Aug. 11, 1981	Adams et al.	179/1.5R	
	4,284,976	Aug. 18, 1981	Gable et al.	340/147	
	4,286,281	Aug. 25 1981	Suzuki	358/4	
	4,287,592	Sept. 1, 1981	Paulish et al.	370/88	
	4,288,809	Sept. 8, 1981	Yabe	358/12	

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	Applicants John C. Harvey and James W. Cuddihy	
<b>Title: Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,290,141	Sept. 15, 1981	Anderson et al.	455/2	
	4,290,142	Sept. 15, 1981	Schnee et al.	455/3	
	4,292,650	Sept. 29, 1981	Henderickson	358/173	
	4,295,223	Oct. 13, 1981	Shutterly	455/72	
	4,302,771	Nov. 24, 1981	Gargini	358/86	July 23, 1980
	4,304,990	Dec. 8, 1981	Atalla	235/380	Feb. 4, 1980
	4,305,101	Dec. 8, 1981	Yarbrough et al.	360/69	Apr. 16, 1979
	4,305,131	Dec. 8, 1981	Best	364/521	
	4,305,131	Dec. 8, 1981	Best	364/521	Mar. 31, 1980
	4,306,289	Dec. 15, 1981	Lumley	364/200	Feb. 4, 1980
	4,306,305	Dec. 15, 1981	Doi et al.	371/38	Oct. 19, 1979
	4,307,446	Dec. 22, 1981	Barton et al.	364/200	May 2, 1979
	4,310,854	Jan. 12, 1982	Baer	358/143	Aug. 29, 1979
	4,312,016	Jan. 19, 1982	Glaab et al.	358/188	Feb. 2, 1979
	4,313,132	Jan. 26, 1982	Doles et al.	358/114	Oct. 31, 1979
	4,314,367	Feb. 2, 1982	Bakka et al.	370/60	Jan. 17, 1980
	4,316,055	Feb. 16, 1982	Feistel	178/22.06	Dec. 30, 1976
	4,316,245	Feb. 16, 1982	Luu et al.	364/200	Dec. 7, 1978
	4,318,125	Mar. 2, 1982	Shutterly	358/121	Apr. 25, 1979
	4,319,079	Mar. 9, 1982	Best	178/22.09	Jan. 17, 1980

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		Applicants John C. Harvey and James W. Cuddihy	
<b>Title: Signal Processing Apparatus and Method</b>		Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,322,745	Mar. 30, 1982	Saeki et al.	358/123	Mar. 21, 1980
	4,323,921	Apr. 6, 1982	Guillou	358/114	Jan. 23, 1980
	4,323,922	Apr. 6, 1982	den Toonder et al.	358/117	Dec. 17, 1979
	4,325,078	Apr. 13, 1982	Seatom et al.	358/117	Nov. 20, 1979
	4,329,675	May 11, 1982	Van Hulle	358/86	Sep. 23, 1980
	4,329,684	May 11, 1982	Monteath et al.	340/707	Jan. 15, 1980
	4,331,973	May 25, 1982	Eskin et al.	358/84	Oct. 20, 1980
	4,331,974	May 25, 1982	Cogswell et al.	358/86	Oct. 21, 1980
	4,332,980	June 1, 1982	Reynolds et al.	179/2A	May 30, 1980
	4,333,152	June 1, 1982	Best	364,521	June 13, 1980
	4,334,242	June 8, 1982	Mangold	358/127	Jan. 14, 1980
	4,336,553	June 22, 1982	den Toonder et al.	358/120	May 14, 1980
	4,336,559	June 22, 1982	Koyama et al.	360/73	Nov. 9, 1978
	4,337,480	June 29, 1982	Bourassin et al.	358/93	Feb. 8, 1990
	4,337,483	June 29, 1982	Guillou	358/114	Jan. 31, 1980
	4,338,628	July 6, 1982	Payne et al.	358/120	Dec. 19, 1979
	4,339,798	July 13, 1982	Hedges et al.	364/412	Dec. 17, 1979
	4,340,903	July 20, 1982	Tamura	358/10	Aug. 6, 1980
	4,347,498	Aug. 31, 1982	Lee et al.	340/825.02	Nov. 21, 1979
	4,347,532	Aug. 31, 1982	Korver	358/183	Oct. 14, 1980

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	4,353,088	Oct. 5, 1982	den Toonder et al.	358/120	May 14, 1980
	4,354,201	Oct. 12, 1982	Sechet et al.	358/122	June 11, 1980
	4,355,372	Oct. 19, 1982	Johnson et al.	364/900	Dec. 24, 1980
	4,360,827	Nov. 23, 1982	Braun	358/85	June 2, 1981
	4,361,730	Nov. 30, 1982	Barber et al.	179/5 R	Aug. 29, 1980
	4,361,877	Nov. 30, 1982	Dyer et al.	364/900	Feb. 5, 1980
	4,364,081	Dec. 14, 1982	Hashimoto et al.	358/13	Apr. 16, 1981
	4,365,110	Dec. 21, 1982	Lee et al.	178/22.10	June 5, 1979
	4,367,548	Jan. 4, 1983	Cotten, Jr. et al.	370/3	Apr. 10, 1980
	4,367,557	Jan 4, 1983	Stern et al.	455/4	May 25, 1979
	4,375,579	Mar. 1, 1983	Davida et al.	178/22.10	Jan. 30, 1980
	4,375,651	Mar. 1, 1983	Templin et al.	358/191.1	July 27, 1981
	4,379,205	Apr. 5, 1983	Wyner	178/22.10	June 22, 1979
	4,381,522	Apr. 26, 1983	Lambert	358/86	Dec. 1, 1980
	4,383,257	May 10, 1983	Giallanza et al.	340/825.47	Dec. 12, 1980
	4,388,643	June 14, 1983	Aminetzah	358/123	Apr. 6, 1981
	4,388,645	June 14, 1983	Cox et al.	358/147	Apr. 13, 1981
	4,389,671	June 21, 1983	Posner et al.	358/124	Sept. 29, 1980
	4,390,898	June 28, 1983	Bond et al.	358/119	Mar. 23, 1981
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	4,390,904	June 28, 1983	Johnston et al.	358/335	Sep. 20, 1979
	4,394,687	July 19, 1983	Hutt et al.	358/147	Apr. 30, 1980
	4,394,691	July 19, 1983	Amano et al.	358/194.1	July 30, 1981
	4,394,762	July 19, 1983	Nabeshima	371/38	Jan. 6, 1981
	4,395,757	July 26, 1983	Bienvenu et al.	364/200	Apr. 14, 1981
	4,396,947	Aug. 2, 1983	Cheung	358/124	Mar. 26, 1980
	4,398,216	Aug. 9, 1983	Field et al.	358/121	Sept. 19, 1980
	4,400,587	Aug. 23, 1983	Taylor et al.	179/27D	Aug. 25, 1981
	4,404,589	Sept. 13, 1983	Wright, Jr.	358/86	Oct. 21, 1980
	4,405,942	Sept. 20, 1983	Block et al.	358/119	Mar. 3, 1982***
	4,410,917	Oct. 18, 1983	Newdoll et al.	360/15	Sept. 14, 1981
	4,413,339	Nov. 1, 1983	Riggle et al.	371/38	June 24, 1981
	4,422,105	Dec. 20, 1983	Rodesch et al.	358/903	Sep. 30, 1980
	4,424,532	Jan. 3, 1984	den Toonder et al.	358/120	May 9, 1983***
	4,425,581	Jan. 10, 1984	Scweppe et al.	358/148	Apr. 17, 1981
	4,430,731	Feb. 7, 1984	Gimple et al.	370/30	Apr. 29, 1981
	4,433,207	Feb. 21, 1984	Best	178/22.09	Sept. 10, 1981
	4,434,323	Feb. 28, 1984	Levine et al.	178/22.17	June 29, 1981
	4,434,436	Feb. 28, 1984	Kleykamp et al.	358/118	July 13, 1981
	4,434,464	Feb. 28, 1984	Suzuki et al.	364/200	Mar. 31, 1981

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	4,446,519	May 1, 1984	Thomas	364/200	May 26, 1981
	4,449,247	May 15, 1984	Waschka, Jr.	455/9	Jul. 30, 1980
	4,451,701	May 29, 1984	Bendig	179/2 TV	Oct. 11, 1983***
	4,467,139	Aug. 21, 1984	Mollier	178/22.08	Mar. 12, 1981
	4,467,356	Aug. 21, 1984	McCoy	358/146	Sept. 24, 1981
	4,471,163	Sept. 11, 1984	Donald et al.	178/22.08	Oct. 5, 1981
	4,471,164	Sept. 11, 1984	Henry	178/22.11	Oct. 13, 1981
	4,475,123	Oct. 2, 1984	Dumbauld et al.	358/114	Apr. 2, 1981
	4,488,179	Dec. 11, 1984	Krüger et al.	358/181	Sept. 23, 1981
	4,491,983	Jan. 1, 1985	Pinnow et al.	455/612	Apr. 29, 1982***
	4,513,174	Apr. 23, 1985	Herman	178/22.08	Mar. 19, 1981
	4,528,588	July 9, 1985	Löfberg	358/122	Sept. 25, 1981
	4,528,589	July 9, 1985	Block et al	358/122	Feb. 1, 1984***
	4,536,791	Aug. 20, 1985	Campbell et al.	358/122	Mar. 31, 1981
	4,593,353	June 3, 1986	Pickholtz	364/200	Oct. 26, 1981
	4,598,288	July 1, 1986	Yarbrough et al.	340/825.34	Dec. 20, 1983***
	4,689,661	Aug. 25, 1987	Barbieri et al.	358/12	June 22, 1981
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	4,862,268	Aug. 29, 1989	Campbell et al.	358/141	Apr. 18, 1985***
	Re. 31,735	Nov. 13, 1984	Davidson	358/124	July 26, 1982***

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	Title: <b>Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995

\* - If pertinent

\*\*\* - Claims priority from parent application filed prior to Nov. 3, 1981

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EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION	
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	1 554 411	Oct. 17, 1979	Great Britain	H04b 3/54		X
	2 034 995	June 11, 1980	Great Britain	H03J 7/18, 5/00		X
	23 38 380	Feb. 13, 1975	Germany		abstract	X
	29 18 846	Nov. 13, 1980	Germany	F26B 12/02	X	
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	Applicants John C. Harvey and James W. Cuddihy	
<b>Title: Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995	Group: 2602

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	"7609 Sat-A-Dat Decoder/Controller," Group W Satellite Communications (advertisement) 2 pages.
	"Teletext Timing Chain Circuit (SAA5020)," (August 1978), pp. 109.
	"Teletext Video Processor (SAA 5030)," Mullard (December 1979), pp. 1-9.
	"Video Text Decoder Systems (Signetics)", <u>Phillips IC Product Line Summary</u> (May 1981), pp. 15-16.
	"Teletext Acquisition and Control Circuit (SAA5040 Series)," Mullard (June 1980), pp. 1-16.
	"Asynchronous Data Transmission System Series 2100 VIDATA," Wagener Communications, Inc.

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	Applicants John C. Harvey and James W. Cuddihy	
<b>Title: Signal Processing Apparatus and Method</b>	Filing Date: June 7, 1995	Group: 2602

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
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	"Zenith VIRTEXTTM . . . Vertical Interval Region Text and Graphics," Zenith Radio Corporation (flyer), 7 pages.
	Anon, "Television Network Automated By Microcomputer-Controlled Channels," Computer Design, Vol. 15, no. 11, (Nov., 1976), pp. 50, 59, 62, 66 and 70.
	Kinik, et al., "A Network Control System For Television Distribution By Satellite," <u>Journal of The SMPTE</u> , Feb. 1975, vo. 84, no. 2, pp. 63-67.
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**PATENT**  
Docket No. 5634.318

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventors: John C. Harvey and James W.  
Cuddihy

Serial No.: 08/487,411

Filing Date: June 7, 1995

For: Signal Processing Apparatus and  
Methods

Group Art Unit: 2602

Examiner:

Assistant Commissioner of Patents  
Washington D.C. 20231

05 FEB 6 1997  
GROUP 260  
57

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Applicants believe that all references cited on the attached Form PTO-1449 were submitted to the PTO in U.S. Patent Application Serial No. 08/448,143, filed 23 May 1995. Therefore, no copies of the listed references are provided herewith.

Japanese Published Patent Application No. 60-61935 discloses a video recording procedure by which programs selected for recording from a table of programs on a recording card are stored to a memory which actuates a built-in recording timer. An English abstract of the patent is provided with the listed reference.

Japanese Published Patent Application No. 61-50470 discloses a program reserving device of a television receiver encompassing a control circuit displaying content of reservation and a means for supplying plural background pictures to a display pattern of reserved content and changing the background picture to the 1st and 2nd states depending on the state of the reserved input. An English abstract of the patent is provided with the listed reference.

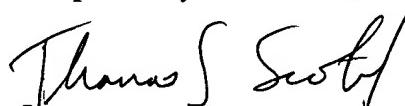
European Patent 0 133 985 discloses an automatic on-off switching device for a video recorder which responds to a label preceding the TV program to be recorded. An English abstract of the patent is provided with the listed reference.

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office Action on the merits, no certification or fee is required.

Respectfully submitted,



Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: February 5, 1996

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<b>Information Disclosure Statement by Applicant</b>  <b>Title: Signal Processing Apparatus and Method</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 7, 1995	Group 2602

96 FEB -6 PM 3:07  
GROUP 260

### U. S. Patent Documents

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date
	2,875,270	2/24/59	Wendt et al.	178/5.1	
	3,440,427	4/22/69	Kammer	250/210	
	3,485,946	12/23/69	Jackson et al.	178/6	
	3,500,327	3/10/70	Belcher et al.	340/154	
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	3,564,509	2/16/71	Perkins et al.	340/172.5	
	3,696,297	10/3/72	Otero	325/55	
	3,712,956	1/23/73	Lemelson	178/6.6A	
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	3,848,082	11/12/74	Summers	178/5.6	
	3,889,054	6/10/75	Nagel et al.	178/6.8	
	3,936,868	2/3/76	Thorpe	358/22	
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<b>Information Disclosure Statement by Applicant</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 7, 1995	Group 2602
<b>Title: Signal Processing Apparatus and Method</b>		

**U. S. Patent Documents**

Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	4,032,972	6/28/77	Saylor	358/142	
	4,042,958	8/16/77	Saylor et al.	358/141	
	4,052,719	10/4/77	Hutt et al.	340/324	
	4,055,848	10/25/77	Fearnside	358/8	
	4,064,490	12/20/77	Nagel	364/200	
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	4,096,524	6/20/78	Scott	358/85	
	4,099,258	7/4/78	Parsons	364/900	
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	4,161,728	7/17/79	Insam	340/750	
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	4,178,613	12/11/79	Takahashi et al.	358/183	
	4,203,130	5/13/80	Doumit et al.	358/1	
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	4,231,031	10/28/80	Crowther et al.	340/695	

Examiner	Date Considered
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Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
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	4,243,984	1/6/81	Ackley et al.	340/703	
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	Applicant(s) John C. Harvey and James W. Cuddihy	
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**U. S. Patent Documents**

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	4,430,669	2/7/84	Cheung	358/122	
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Examiner	Date Considered
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Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
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\* - If pertinent

\*\*\* - Claims priority from patent application filed prior to Sept. 11, 1987

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<b>Title: Signal Processing Apparatus and Method</b>		

### Foreign Patent Documents

Examiner Initial	Document Number	Publication Date	Country	Class / Subclass	Translation	
					Yes	No
	60-61935	4/9/85	Japan	G11B15/02	abs.	
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	0 133 985	3/13/85	European Patent Office	H 04 N 7/087	abs.	
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Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Gecsei, Jan. <u>The Architecture of Videotex Systems</u> (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1983), pp. 174-177, 233-238.
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Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
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	Filing Date June 7, 1995	Group 2602

**Title: Signal Processing Apparatus and Method**

### Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Sigel, Efrem et al. <u>Videotext: The Coming Revolution in Home/Office Information Retrieval</u> , (White Plains, NY: Knowledge Industry Publications, Inc., 1980), pp. 6, 7, 13, 28, 33, 34, 36, 37.
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	Title: <b>Signal Processing Apparatus and Method</b>	

### Other Documents

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Biggs, A.J. et al. "Broadcast data in television," <u>GEC Journal of Science and Technology</u> , Vol. 41, No. 4, 1974, pp. 117-124.
	Heuer, D.A. "A Microprocessor Controlled Memory Tuning System," <u>Consumer Electronics</u> , Vol. CE-25, No. 4, August 1979, pp. 677-683.
	Marti, Bernard et al. "ANTIOPE, service de télétexte," journal unk., pp. 17-22.
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<b>Supplemental Information Disclosure Statement by Applicant</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date June 7, 1995	Group 2602
<b>Title: Signal Processing Apparatus and Methods</b>		

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Examiner Initial	Patent Number	Patent Date	Name	Class / Subclass	Filing Date *
	2,510,046	5/30/50	Ellett, et al.	178/5.6	
	2,619,530	11/25/52	Roschke	178/5.1	
	2,892,882	6/30/59	Hughes	178/5.1	
	2,972,008	2/14/61	Ridenour, et al.	178/5.1	
	3,304,416	2/14/67	Wolf	235/92	
	3,336,437	8/15/67	Brouard, et al.	178/5.4	
	3,478,164	11/11/69	Southworth	178/6.6	
	3,576,391	4/27/71	Houghton	178/5.6	
	3,683,111	8/8/72	Southworth	178/6	
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<b>Supplemental Information Disclosure Statement by Applicant</b>	Attorney Docket No. 5634.318	Serial No. 08/487,411
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	4,734,907	3/29/88	Turner	370/60	9/6/85

\*- If pertinent

\*\*\*- Claims priority from parent application filed prior to Sep. 11, 1987.

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Examiner Initial	Document Number	Publication Date	Country	Class / Subclass	Translation Yes	Translation No
	WO 85/03604	8/15/85	PCT Application	H03K 3/84		X
	0 132 007	1/23/85	European Patent Office	H04N 7/16		X
	2 033 699	5/21/80	Great Britain	H04L 1/10, 1/40		X
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**Title: Signal Processing Apparatus and Methods**

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